



All practical, practice gems at Nov. 1 Family Practice Oncology CME Day

Please join us at this year's Family Practice Oncology CME Day to be held Saturday, November 1 at the BC Cancer Agency Research Centre. Our program covers some of the most relevant cancer care topics for primary care today with a focus on early detection and caring for cancer survivors. The program is targeted specifically toward family physicians and primary care providers with each presentation and workshop promising useful pearls that will benefit your patients and their families.

The event (see enclosed flyer) is accredited by the



College of Family Physicians of Canada and the BC Chapter for up to 6 Mainpro-M1 credits.

"We are excited to present this program which provides one of the best CME opportunities for family physicians to gain accurate, current cancer care information for their practices," noted Dr. Raziya Mia, the Network's Clinical Coordinator of Education. "We also listened to feedback from last year and added more time for connecting with colleagues."

BC Cancer Agency Head, Dr. Max Coppes, will provide the opening address followed by

Early Bird registration until September 30 is \$100 for physicians and \$50 for nurses and pharmacists – www.fpon.ca

clinical presentations addressing the most requested topics of the year. The afternoon includes opportunity to take part in two of three case based workshops – Management of Chemotherapy Side-effects, Advanced Cancers and Colorectal Cancer Screening. The latter two were developed in partnership with UBC's Division of Continuing Professional Development.

Register at www.fpon.ca by September 30 to receive the Early Bird rate of \$100 for physicians and \$50 for other disciplines. A capacity crowd is expected so don't delay. Hope to see you there!

Help improve cancer care guidelines in mere minutes

Win a \$100 dollar gift card!

The Provincial Survivorship Program and the Family Practice Oncology Network invite you to take part in a short survey about Cancer Care Guidelines for BC physicians. If you are a BC family physician, general practitioner in oncology (GPO), an oncologist, or a general surgeon, we need your help. A few minutes of your time to complete a short online survey will have an important impact.

The survey is funded as part of a Canadian Partnership Against Cancer (CPAC) Survivorship and Primary Care Program project and focuses on the Breast and Colorectal Cancer Screening and Follow-up Guidelines published by the BC Guidelines and Protocols Advisory Committee in 2013.

By participating in our survey, you will

help us better understand whether and how these guidelines are used. The Family Practice Oncology Network is committed to continued evaluation and exploration of the most effective, efficient ways of supporting physicians to incorporate cancer care guidelines into day to day practice.

The survey opens October 1, 2014. It will take less than ten minutes to complete. All responses will be anonymous and results will be reported in aggregate form. You will also have the option to sign up for a separate subsequent interview on the subject.

When you have completed the survey another link will be provided where you can enter into a draw to win one of three \$100 gift cards from Best Buy, Chapters or Home Depot. Prize draws will be held in March 2015. Tim Horton's gift cards

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will be awarded to the first 100 respondents.

"The information within these guidelines provides current, evidence-based advice for family physicians," notes Network Chair and Medical Director, Dr. Phil White. "We need to focus now on ensuring the information is utilized most effectively and strengthens communications between oncologists and primary care. Please share your insight."

Here's the link to the survey:
<http://surveys.phsa.ca/s/fpon/>

Contact Dr. Catherine Clelland or Lisa McCune at survivorship@bccancer.bc.ca.

New advanced cancer community workshops

The **Cancer Care Outreach Program on Education (CCOPE)** is an ongoing partnership between UBC's Division of Continuing Professional Development (UBC CPD), the BC Cancer Agency's (BCCA) Family Practice Oncology Network (FPON), and the BCCA Screening Groups. The overall aim of the program is to support BC family physicians in providing best practice care along the cancer continuum. Since 2011 more than 500 practitioners have participated in 40 workshops throughout BC.

Ten **advanced cancer workshops** will be offered in BC communities over the coming months as part of the latest installment of our highly successful CCOPE series. The advanced cancer module has been developed by a team of experts including family physicians, palliative care specialists, General Practitioners in Oncology, and CPD educators. The workshop will cover important cancer care topics for family physicians in advanced breast, lung and pancreatic cancer including effective techniques for disclosing an advanced cancer diagnosis, common treatment options, palliative approaches to care, and practice-relevant resources.

Workshop features:

- Evening, small group, case-based discussions over dinner led either by a local General Practitioner in Oncology or physician actively practicing oncology
- Complemented by a follow-up session to discuss emerging questions with the local facilitator and specialist
- 4.5 Mainpro C credits
- Low cost: \$45-50 (discount for electronic course materials)

Breast, colorectal and prostate cancer workshops

Following the success of the CCOPE program to date, the breast, colorectal, and prostate cancer modules have been updated for 2014 and are being offered in 15 BC communities



as Mainpro-C workshops. Please check ubccpd.ca/oncology/community to find out if there is a workshop near you!

Further information

For further details on dates, registration and future workshops please visit ubccpd.ca/oncology/community. Contact Jennie Barrows if you want a CCOPE workshop in your community at jennie.b@ubc.ca, 604.875.8075.

British Columbia's colon screening program

By Dr. Jennifer Telford, MD MPH FRCPC,
Medical Director, Provincial Colon Screening
Program

In November 2013, the full Colon Screening Program became available province-wide. This population-based program started with the fecal immunochemical test (FIT) being



made available through MSP funding on April 1, 2013. The full program pathway was phased into all of the regional health authorities in the fall.

The program pathway is primary-care based, with primary care providers referring asymptomatic individuals between

the ages of 50 and 74 for a screening test – either the FIT or colonoscopy, depending on the patient's risk of developing colon cancer.

Since the program's full pathway launch in November, uptake for colon cancer screening has been strong. Based on early data, some trends have been identified:

- 45% of eligible patients who have completed a FIT have been registered into the program.
- From November 2013 to June 2014, over 91,000 FITs have been completed through the program, and over 22,000 patients have been referred to colonoscopy to investigate an abnormal FIT or for primary screening in higher risk individuals.
- Of the 1,483 patients with an abnormal FIT result that have had their colonoscopy

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“Magic” mouthwash explained



By Dr. Allan Hovan,
Provincial Professional Practice Leader,
Program in Oral Oncology/Dentistry,
BC Cancer Agency Vancouver Centre

Most people are aware of common side-effects of cancer treatment like nausea and hair loss. But many don't realize that more than one-third of people treated for cancer develop complications that affect the mouth. Oral complications from radiation to the head and neck or chemotherapy for any malignancy can compromise patients' health and quality of life and affect their ability to complete planned cancer treatment. For some patients, the complications can be so debilitating that they may tolerate only lower doses of therapy, postpone scheduled treatments, or discontinue treatment entirely. Oral complications can also lead to serious systemic infections.

A variety of mouthwash formulations – known as “magic mouthwashes” – are given to patients to palliate the oral

symptoms of cancer therapy. There is no standard recipe for magic mouthwash but most formulations contain some combination of a topical analgesic agent, a steroid, an antifungal agent, an antibacterial agent and (sometimes) a mucosal coating agent. The logic behind magic mouthwash is to combine ingredients with different potential mechanisms of action to provide the greatest relief for patients. The truth is that it is often difficult to tell whether mouth sores are coming directly from the treatment or, instead, represent some form of opportunistic fungal or bacterial infection. When topical or systemic therapy does not palliate or resolve oral symptoms, biopsy of the affected area is often indicated and these patients should be referred to the BC Cancer Agency's (BCCA) Oral Oncology/Dentistry Clinic.

Contact Dr. Allan Hovan at
ahovan@bccancer.bc.ca

View Dr. Hovan's recent webcast on oral mucositis at www.fpon.ca – CME Initiatives.

Magic Mouthwashes at the BC Cancer Agency:

At BCCA, we commonly prescribe three different mouthwashes which vary in composition and cost to patient. Of note, these mouthwashes require a compounding pharmacy.

1. “Noll's Solution”

Contains 120 ml diphenhydramine, 30 ml nystatin suspension, 2.25 mg dexamethasone, 1/2 gram of tetracycline – all mixed with distilled water to a total volume of 203 ml. The price of Noll's solution is approximately \$52. With a prescription written by a BCCA-affiliated physician, pharmacies can usually get PharmaCare approval within a day

2. “Pink Lady”

Contains an antacid suspension (Maalox) mixed anywhere from 1:1 to 3:1 with viscous lidocaine up to any volume. Patients can be given the ingredients separately to mix themselves which keeps the cost very low. Viscous lidocaine is an open benefit prescription with PharmaCare. A 300 ml bottle mixed at 2:1 would therefore cost approximately \$45.

3. BCCA “Magic Mouthwash”

Contains 2 ml hydrocortisone injection (100 mg), 300 ml Benadryl and 100 ml nystatin mixed up to a 1 litre volume. Approximate cost is \$60.

British Columbia's Colon Screening Program continued from page 2

- and have pathology results available for review: 34% had a normal colonoscopy; 16% had other pathology such as hyperplastic polyps; 25% had low risk pre-cancerous polyps; 24% had high risk pre-cancerous polyps; and 1% had cancer.
- The adenoma and cancer detection rate of the FIT with the current cut-off meets the nationally established benchmark of 50%.
 - Many symptomatic patients in the eligible

age group continue to be registered into the program. Symptomatic patients are not eligible and should be referred directly to a specialist for consult, no FIT required.

- Many patients with a personal history of adenomas who are in colonoscopy surveillance programs have been referred for FIT. These patients do not require FIT and should continue with colonoscopy at the next recommended interval, which can be accommodated in the program by filling out the colonoscopy referral form.

- Since April 1, 2013 when the FIT became available in BC, there has been a slow but steady decrease in the proportion of FITs that are being done outside of the 50-74 year age group. Currently, 13% of FIT users are over the age of 74 and 8% are under the age of 50.

For more information on the Colon Screening Program, or to access program materials including the colonoscopy referral form, educational materials, and program standards, please visit www.screeningbc.ca/colon.

Kitimat patients well served by South African connection



Drs. Andries (Skully) van Schalkwyk (left) and Sabina Kay
Dr. Marius Wahl

There is a lovely lilt to the voices of the main players on Kitimat's cancer care team. Each has strong ties to South Africa and together they have significantly improved cancer care in their community. Drs. Andries (Skully) van Schalkwyk and Sabina Kay are two of BC's original General Practitioners in Oncology having graduated from the Family Practice Oncology Network's GPO Training Program in 2004 (Year 1) and 2005 respectively. Dr. Marius Wahl will join them as the newest GPO in town when he completes his training later this year.

Drs. van Schalkwyk and Kay share a full service family practice and see cancer patients at Kitimat General Hospital's GPO Clinic twice weekly while Dr. Wahl shares a practice with two colleagues. All spend several months working in Kitimat and then return to South Africa – or Kootenay Lake for Dr. Kay – for the periods in between. Here are their perspectives as GPOs:

Dr. Andries van Schalkwyk

Sabina really championed developing an oncology centre for our community spurring both of us to complete the GPO Training Program. The care we provide now is much more comprehensive. Being part of the Agency's overall commitment to community GPOs also ensures that our skills and effort are well utilized.

Personally, I appreciated the professional development the training enabled. The program develops a skill set that the average physician doesn't have and I am a better doctor as a result. At the time, the training was all very exciting and I am glad to report the Agency's original goals – improving care

at the community level; reducing the need for patient travel; and reducing the unmanageable load on oncologists – are being met. Many patients would have been completely stuck without access to the care we provide and the program overall has been very successful here.

I would encourage any family physician to develop an oncology program if there is a need in their community. The work is rewarding and enables personal growth and the opportunity to make a difference for patients.

Contact Dr. Andries van Schalkwyk at drskully@gmail.com

Dr. Sabina Kay

We felt early on that we needed to strengthen our oncology skills and were keen to take the GPO Training as soon as it became available. Our oncology practice is now well organized including responsibility for all pre-chemotherapy appointments plus the administration of the therapy. We don't make the treatment decisions, but we manage the chemotherapy and determine whether each patient is fit to proceed. To this end, we work closely with the oncologists from the Vancouver and Prince George Centres – often by videolink – and can provide quality care for our patients on an ongoing basis.

Previously, cancer care here was fragmented and often unsafe with every physician

supervising their own patients' chemotherapy. We didn't have the continuity we do now – all the more important for patients who cannot afford to travel to larger centres for treatment. Managing chemotherapy is a huge responsibility. The opportunity to gain the knowledge and to care for an aging population with increasing cancer rates is what made me want to become a GPO.

I definitely acquired the needed skills and knowledge through the GPO Training Program. The mentors were amazing and the experience was great. Even now, being able to put faces to names makes it easier to communicate and improves everything! Our community is very thankful and we hope it stays that way.

We have four physicians working at any given time in Kitimat. Both Skully and I are from South Africa and each works 3.5 months followed by one month away. Skully then heads back to South Africa and his family while my husband and I return to our other home on sunny Kootenay Lake.

Contact Dr. Sabina Kay at binassa@gmail.com

Dr. Marius Wahl

My priority is helping Drs. Kay and van Schalkwyk with their GPO work and improving the continuity of care both in Kitimat and in Terrace. Our community is aging with a high incidence of different types of malignancies – far more work than there is time. I was almost overwhelmed when I first came here having to arrange chemotherapy on my own and jumping in just to survive. That's all changed now for the better and I'm looking forward to gaining a broader understanding of chemo protocols.

Contact Dr. Marius Wahl at marius.wahl@gmail.com

Next GPO training course begins February 23, 2015

The GPO Training Program is an eight-week course offering rural family physicians and newly hired Agency GPOs and Nurse Practitioners the opportunity to strengthen their oncology skills and knowledge. The program covers BC and the Yukon and includes a two-week introductory module held twice yearly at the Vancouver Cancer Centre followed by six weeks of flexibly scheduled clinical rotation at the Centre where participants' patients are referred. The program is accredited by the College of Family Physicians of Canada and the BC Chapter. Eligible physicians will receive a stipend and have their expenses covered. Full details at www.fpon.ca

HPV Vaccination in BC: Update on school based and young adult women programs

By Shaila Jiwa, Vaccine Educator, BC Centre for Disease Control, and Dr. Monika Naus, Medical Director Immunization Programs and Vaccine Preventable Diseases Service

School based HPV program

Since 2008, the quadrivalent HPV vaccine has been routinely offered to grade 6 and grade 9 girls through BC's school-based immunization program. In 2012/13, 69.1% of grade 6 girls received two doses, well below the uptake for other vaccines delivered and/or assessed at grade 6 such as hepatitis B (90.2%), meningococcal C (88.7%), and varicella (84.3%, assessed by immunization or prior disease). The HPV uptake rate has increased by only 7% since the first year of the program, and appears to have reached a plateau with little change in the past 3 years.

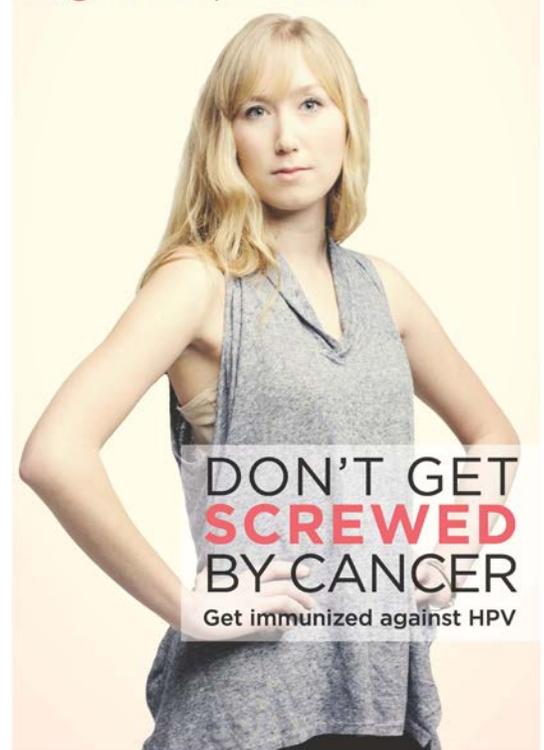
This vaccine has an excellent efficacy and safety profile and prevents several HPV-associated cancers as well as genital warts. We ask that physicians partner with local public health to encourage uptake by vaccine hesitant girls and/or their parents. While the busy nature of a primary care office visit is well understood, a simple question to your pre-teen clients such as, "Have you been vaccinated against HPV?" and a strong recommendation, "The vaccine is safe and effective – I recommend HPV vaccination for all girls and young women," from a trusted physician has been identified as a strong driver of the decision to vaccinate against HPV.

BC is currently on a 3-dose schedule for girls and young women born on or after 1994 who are in grade 6 and older. However there is national interest in exploring a reduced dosing schedule for this vaccine due to its high immunogenicity when given to girls aged 10-14 years. Quebec is the first province to adopt a 2-dose schedule where girls receive the series in grade 4, and similar schedule changes may occur in other provinces including BC.

Young adult women HPV program

As part of our strategy to increase HPV protection, in April 2012, BC launched a one-time publicly funded program using the bivalent HPV vaccine. Eighty thousand doses of this vaccine were made available to females 26 years of age or younger at series commencement (born between 1988 and 1994). This program is provided at no cost while quantities are available and before the vaccine expires in August 2015. Interested physicians should talk to their local health unit about obtaining vaccine for their patients. The vaccine is also available at local pharmacies, STI clinics and local health

Program Expanded



Attention all women in BC 26 and younger!

units. As this is a one-time program, when the publicly funded vaccine is no longer available, those who have started a series will have to purchase subsequent doses to complete their 3-dose series.

For more information regarding the HPV vaccine as well as other immunizations, please refer to Immunizebc.ca

Upcoming oncology CME webcasts

You will not want to miss these Oncology CME Webcasts offered in partnership with the UBC's Division of Continuing Professional Development:

- October 16 – Chronic Lymphocytic Leukemia with the BC Cancer Agency's Dr. Greg Dueck
- November 29 – Sarcomas with the BC Cancer Agency's Dr. Paul Clarkson

- January 15 – Prostate Cancer: Managing Side-effects of Androgen Deprivation Therapy with Vancouver Prostate Centre's Drs. Stacy Elliott and Jennifer Locke

All Webcasts take place from 8-9:00 a.m. PDT and there is no cost to participate. Register at ubccpd.ca/learning-format/webinars. Recordings of all sessions are available at www.fpon.ca.

This program is nationally accredited by the College of Family Physicians of Canada and the BC Chapter for up to 1 M1 credit. Apply what you've learned and explore how to earn an additional 2 Mainpro C credits through the College's Linking Learning to Practice initiative – cfpc.ca/Linking_Learning_to_Practice/

New online tool available to support informed decision making around screening mammograms

By Dr. Christine Wilson, Medical Director, BC Cancer Agency Screening Mammography Program

British Columbia now has a comprehensive tool that can support women in making an informed decision to screen for breast cancer using screening mammography.

The BC Cancer Agency's Screening Mammography Program (SMP) has developed an online decision aid (<http://decisionaid.screeningbc.ca>) that generates a personalized screening outcomes report for women between the ages of 40-74 who:

- Do not have a personal history of breast cancer;
- Do not have any breast problems; and
- Have not been told that they are at high risk of breast cancer.

Women complete a short, online form by answering questions about age, previous screening history, family history, previous benign biopsies and personal cancer history. Upon submitting the form, a personalized

report is generated. Based on BC data, this report shows the likelihood of experiencing the following screening outcomes at the next screen:

- A breast cancer detected at screening;
- A false positive mammogram; and
- A false positive biopsy (when a biopsy is done and the results are normal – not cancer).

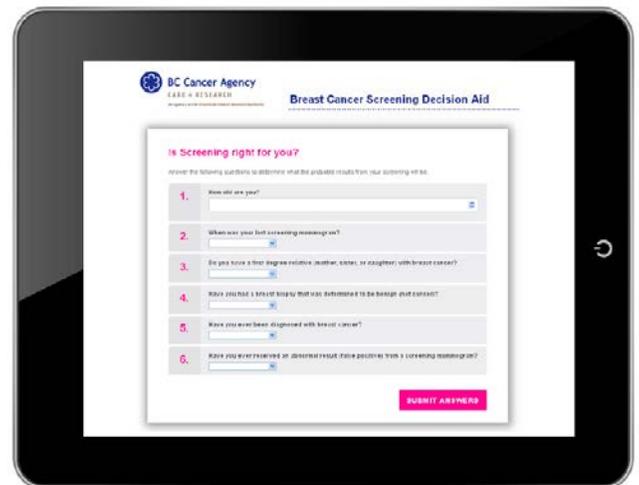
In addition to the personalized report, the SMP Decision Aid provides women with information tailored to support informed patient decision making, including:

- The benefits and limitations of screening mammography;
- Comparative BC statistics for women in the same age group;
- Print functionality for those who wish to print

and discuss results with their health care provider; and;

- Links to additional breast cancer screening information.

The Screening Mammography Decision Aid can be found at <http://decisionaid.screeningbc.ca> or by visiting the Screening website at www.screeningbc.ca/breast



Update on lung cancer screening

By Dr. Stephen Lam MD, FRCPC
Professor of Medicine, UBC and Chair,
BC Cancer Agency Lung Tumour Group

Screening for lung cancer with low dose computed tomography can reduce mortality from the disease by 20% in high risk smokers. There are several important aspects in implementing a province-wide screening program. The most important aspects are to identify people who are at high enough risk to warrant screening and the appropriate management of lung nodules found at screening. An accurate risk prediction model is more efficient than age and pack years of smoking alone at identifying those who will develop lung cancer and die from the disease.



Dr. Stephen Lam

Algorithms are available for assessing people who are found to have lung nodules on a screening CT to determine who needs additional imaging or invasive investigations. Both the lung cancer risk prediction tool and the lung nodule malignancy risk calculator can be accessed from the Canadian Brock University website: www.brocku.ca/lung-cancer-risk-calculator.

Concerns about low dose computed tomography screening include false positive results, over-diagnosis, radiation exposure, and costs. Further work is needed to define the frequency and duration of screening and to refine risk prediction tools so that they can be used to assess the risk of lung cancer in special populations.

Another important area is the use of computer vision software tools to facilitate high throughput interpretation of low dose computed tomography images so that costs can be reduced and the consistency of scan interpretation can be improved. Sufficient data are available to support the implementation of screening programs at the population level in stages that can be expanded when found to perform well to improve the outcome of patients with lung cancer.

The BC Cancer Agency is working towards a pilot lung cancer screening program in BC. Review Article: Tammemagi MC, Lam S. Current Issues in Low-dose Computed Tomography Screening for Lung cancer. *BMJ*. 2014 May 27;348:g2253. doi: 10.1136/bmj.g2253.

Contact Dr. Stephen Lam at slam2@bccancer.bc.ca

British Columbia's cervical cancer screening rates are declining

By Dr. Dirk van Niekerk FRCPC(C), Medical Director, Cervical Cancer Screening Program, BC Cancer Agency

Despite the many benefits of regular cervical cancer screening, fewer women in this province are getting Pap tests. Further intervention is needed to reverse this trend and drive awareness around the benefits of regular Pap tests.

British Columbia's current cervical screening participation rate for 21-69 year olds is 69.9%. This rate has been declining in recent years. Furthermore, participation rates are significantly lower than the BC average for some regions in BC, particularly urban areas like Richmond, Vancouver and the Fraser Valley.

There are many theories as to why women are not being screened, including misconceptions around the test, confusion about eligibility, access to a family physician, time, fear and embarrassment, transport difficulties, disabilities, literacy and language barriers.

As primary care providers, you are the single biggest influencer in a woman's decision to participate in screening. It is important that your eligible patients are aware that a Pap test is an excellent way to prevent cervical

cancer, and the only way to detect abnormal cells in the cervix which, if left untreated, could develop into cancer.

Women should also be aware of when to start screening and at what interval to return. We recommend that women start having Pap tests at age 21. Pap tests should be done every year for the first 3 years; then continue every 2 years if results are normal.

Women should still get regular Pap tests if they:

- Have had the HPV vaccine
- Have only had 1 sexual partner
- Have been with their partner for awhile
- Have been through menopause
- Are no longer having sex
- Are in a same-sex relationship
- Are transgendered with a cervix



For more information on cervical cancer screening, please visit www.screeningbc.ca. Our website includes a clinic locator that allows women to find a drop-in clinic near them. Clinic listings include details on whether a female provider is available, or if service is offered in specific languages (ie. Punjabi, Chinese, etc.).

Systemic therapies for breast cancers

By Dr. Karen Gelmon, Medical Oncologist, BC Cancer Agency Vancouver Centre

In the last few decades the treatment of breast cancer has made amazing advances. The survival of early breast cancer has improved and more women are being cured. As well, the duration of good quality survival for women with recurrent breast cancer, or advanced cancer has improved.

What has made the difference? There are a number of factors including multidisciplinary care, earlier diagnosis with screening mammography, and better therapies, but



Dr. Karen Gelmon

probably the most significant factor is the increased understanding of the different kinds of breast cancer.

We have a long way to go before we will really have individualized care, but already we are tailoring treatment according to specific molecular aspects of a cancer.

So what are those factors and how do we approach them? We used to only refer to the architectural aspects of a cancer. These include the size, the involved

lymph nodes and whether it invaded into the lymphatic vessels of the tumour. We now also consider biological factors which

include whether the tumour has estrogen or progesterone receptors. Is the tumour HER2

View the full webcast of this topic at www.fpon.ca – CME Initiatives.

overexpressing? HER2 is a gene that is in all of our cells but in 15- 20% of breast cancer is amplified meaning there are too many copies of the gene in the breast cancer cell. What is the grade of the cancer, which is determined by the pathologist, and is it an indication of the proliferative potential of the cancer? And we are also starting to look at whether the cancer is related to BRCA mutations which may be inherited from a mother or father. Seven percent or fewer of breast cancers

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Interdisciplinary management of lymphedema subsequent to cancer treatment

By Dr. Rezwan Chowdhury, MD, FRCPC, DABR;
Christine Ransom, RN, BSN, M.Ed (CNPS);
Maureen Ryan, RN, BSN, MN;
Krista Clement, MLIS – all of the
BC Cancer Agency Sindi Ahluwalia Hawkins
Centre for the Southern Interior

View the full webcast of this topic
at www.fpon.ca – CME Initiatives.

Lymphedema and risk factors

Lymphedema is an accumulation of protein rich fluid in a region of the body as a result of damage or compression of lymphatic nodes or channels. In North America it is most often secondary to cancer or surgery affecting lymph nodes. Post operative infection and axillary web syndrome are suspected to increase risk for lymphedema development, and radiation is considered a contributing factor. Although most often associated with breast cancer, 16% of patients treated for other cancers are also at risk. If lymphedema develops, it is most likely to do so within two years of treatment.

Patient education

Patient education about the lifelong risk for

lymphedema should be considered part of informed consent. Patients benefit from specific education on skin care and risk reduction through maintaining a healthy BMI, exercise, and avoiding trauma to the affected limb. Patients must be advised in lay terms to seek medical attention in the event that swelling develops or worsens or signs of infection occur. This information should be reinforced periodically to ensure timely medical care. It is important that individuals are aware that treatments exist and that research towards best practice is being conducted.

Symptoms

Initial symptoms of lymphedema may include tightness or heaviness of the affected limb. Later in its development, progressive swelling of a limb, pain and/or skin changes may occur.

Diagnosis

Circumferential measurements of both the affected and unaffected limb provide a



baseline for diagnosis. Landmarks for upper limbs can begin at the wrist and at 5 cm intervals proximally, or at the ankle and at 10 cm intervals. Generally, a difference of 2-3 cm represents mild lymphedema, 3-5 cm moderate, and more than 5 cm difference is considered severe lymphedema. Consistent landmarks are important to monitor lymphedema progression and treatment benefit.

A thorough medical history and physical examination is critical for the appropriate management of lymphedema. The presence of DVT, disease recurrence, and infection (cellulitis) must be ruled out prior to the initiation of any therapy.

Management

Early intervention is critical to prevent the debilitating consequences of advanced lymphedema which may include impaired functioning, social isolation, anxiety, and depression. Patients may require support in accepting the chronicity of this condition.

Treatment

Treatment for lymphedema depends on the stage at presentation and may include a combination of physiotherapy, lymphatic drainage, compression garments and/or bandaging. Optimal lymphedema



Reproduced with permission from: Lymphoedema Framework, Best Practice for the Management of Lymphoedema, International Consensus, London: MEP LTD, 2006.

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management requires an inter-disciplinary approach and may include physiotherapists, certified lymphedema massage therapists, advanced certified garment fitters, nurses, nutritionists, and social workers. Current recommendations are delineated in the Webcast.

Complications

The **pain, shoulder or neck strain, and limb dysfunction** that may accompany lymphedema require careful review in order to be treated successfully. **Cellulitis** needs to be treated with antibiotics that cover gram-positive organisms. **Lymphorrhea**, the weeping of lymphatic fluid through the skin, requires meticulous skin care and dressings to prevent maceration and infection. In the palliative setting, subcutaneous drainage may provide comfort. Though rare, **secondary malignancy** can be a sequel of chronic lymphedema.

Resources

The **BC Cancer Agency Libraries** have a wide range of books and videos available for patient and health care professional use. Librarians are available to conduct literature searches to assist in complex care situations. Materials can be mailed out.

As specialized professionals are not available in every community, assistance may be located through accessing **websites** to locate specialized physiotherapists and lymphedema massage therapists and advanced certified garment fitters.

Lymphedema resources

Books & DVDs

BCCA Library Catalogue <http://bccca.andornot.com> – request loan of books and more anywhere in BC.

Online

On the BC Cancer Agency Website – www.bccancer.bc.ca – look at:

- Nursing Symptom Management Guidelines for the provincial lymphedema guideline;
- Patient “Types of Cancer” info on breast cancer for a detailed summary document for patients
- Healthcare Professionals Cancer Management Guidelines on breast cancer for follow up and exercise.

Recommended Websites: Look for the Lymphedema page for links to valuable Canadian and international sites with sections for patients and professionals: www.bccancer.bc.ca/PPI/RecommendedLinks/coping/symptomssideeffects/lymphedema.htm

Contacts

Physiotherapy: you can usually make a referral to your local hospital. Also search the BC Physiotherapy Association,

“Find a Physio” – special topics: Oncology, Lymphatic drainage, Upper / Lower extremities, Breast health: bcphysio.org/

Massage, e.g. Vodder Therapy: www.vodderschool.com/find_a_therapist

Oncology Nutrition: outside a BCCA clinic, call HealthLink BC’s 8-1-1 line (www.healthlinkbc.ca) for healthy eating questions and personalized nutrition information – a cancer dietitian is available.

Certified Garment Fitters: check with local prostheticists or physiotherapists for local services. Also:

- BC Lymphedema Association offers a helpful but not comprehensive list of fitters in BC: www.bclymph.org/
- Canadian Cancer Society “local resources” page also lists some garment fitters/compression garment sources. Enter your area and look for the lymphedema management services link: info.cancer.ca/CSD/searchCon.aspx?id=3172&lang=E&sri=N&pc=&AspxAutoDetectCookieSupport=1

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fall into this category, but we are starting to recognize that they may be sensitive to different medications. Finally, age may be a factor in terms of the disease progression with young women (<40) having a higher risk.

Hormone sensitive tumours are most responsive to endocrine agents which are used more and for longer durations for both pre and postmenopausal women. For many women, ten years of adjuvant hormone therapy may be recommended. AntiHER2 agents such as trastuzumab are used in

the neoadjuvant, adjuvant and metastatic settings and are very effective in improving survival. New antiHER2 agents, often given as dual therapy, are being tested in early breast cancer and have been approved in advanced disease. Chemotherapy is given for high risk cancers but is used less frequently. Specific gene tests often help determine the risk of the cancer recurrence and the role of chemotherapy in hormone sensitive tumours.

Radiation to axillary nodes as well as the breast or chest wall has also impacted survival. Studies of exercise suggest a positive role for this modality. Trials looking

at diet and insulin modifying agents are being done to further our understanding of their role.

We are improving the care of patients but there is still work to be done. By analyzing tumours with sophisticated genomic assessments and by understanding more about the host’s role including immune factors, we will continue to improve the outcomes of persons diagnosed with breast cancer.

Contact Dr. Karen Gelmon at kgelmon@bccancer.bc.ca

Prostate cancer: Managing side-effects of androgen deprivation therapy

By Drs. Jennifer Locke, R2, Department of Urologic Sciences and Stacy Elliott, Clinical Professor, Department of Psychiatry (Sexual Medicine) and Urologic Sciences, Faculty of Medicine, UBC, and Prostate Cancer Supportive Care Program, Vancouver Prostate Centre

What is ADT?

Approximately half of all men with prostate cancer (CaP) undergo ADT at some point during their treatment. Androgen Deprivation Therapy (ADT) suppresses the production of the androgen dihydrotestosterone (DHT), which is derived from testosterone, and is known to accelerate CaP cell growth.

ADT is commonly administered through luteinizing-hormone-releasing hormone (LHRH) agonists (i.e. Leuprolide, Goserelin, Triptorelin) that over stimulate the hypothalamis-adrenal-gonadal axis, stopping production of testosterone via a feedback loop. Alternatively, LHRH antagonists (i.e. Cetrorelix, Ganirelix, Abarelix, Degarelix) inhibit the activation of the axis in its entirety. Various other hormonal agents, such as androgen receptor antagonist (i.e. Casodex, Flutamide, MDV3100), CYP17A1 inhibitors (i.e. Abiraterone, Ketoconazole) and 5 α -reductase inhibitors (i.e. Dutasterone, Finasteride) are used as adjuncts to ADT agents. These agents act to block the production of testosterone (CYP17A1), the conversion to DHT (5 α -reductase), and the activation of the androgen receptor itself. ADT can be prescribed continuously or intermittently.

Learn more about this topic at our November 1, 2014 Family Practice Oncology CME Day (see page 1) plus take part in the Webcast on this topic on January 15, 2015 – www.fpon.ca

ADT has a multitude of systemic effects. In order to manage these sometimes debilitating effects and to promote maintenance of good quality of life (QOL), both the patients on ADT, and the physicians who care for them, need to be aware of how ADT works and how to manage associated side-effects.

Relevance to you

CaP patients (and their partners) are poorly informed about the common side-effects of ADT and strategies for managing them¹. Furthermore, physicians are ill-informed about the incidence of side-effects². In a Canadian wide survey of primary physicians, 50% indicated feeling uncomfortable counseling patients on ADT³. Even uro-oncologists show little consistency in how they inform patients about those side-effects³.

Although there are standards of care to address when it is appropriate to prescribe ADT, there are no clinical guidelines about what patients should be told when beginning this treatment and/or what the primary care physician can expect in terms of frequency and management of these side-effects.

Counseling patients on ADT side-effects

Highly prevalent ADT side-effects include fatigue (33-47%⁴), hot flashes (44-80%⁴), low libido (58-91%⁴), and erectile dysfunction (73-95%⁴). Exercise is one of the best means to manage fatigue⁵⁻⁶. Evidence supports venlafaxine, transdermal estradiol or medroxyprogesterone as effective treatments for hot flashes⁷. Though erectile dysfunction can be treated (see Montorsi et al.⁸), low libido and loss of intimacy are harder to treat and greatly impact men and their partners. Less frequent but important ADT side-effects include emotional lability, depression and cognitive changes (19-48%⁴). These side-effects significantly reduce the quality of life (QoL) of both patients and partners.

Serious medical consequences of ADT include an increased risk for cardiovascular disease (CVD), metabolic syndrome (MetS; 55%⁴) and osteoporosis (15%⁴). CVD, MetS and osteoporosis are known to be associated with poor clinical outcome and reduced QoL. MetS is best addressed by a multi-modality approach including metformin and lifestyle changes⁹. The risk of bone fractures



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Drs. Jennifer Locke (left) and Stacy Elliott of the Vancouver Prostate Centre

secondary to osteoporosis may be attenuated with Calcium and Vitamin D supplementation but bone drugs such as biphosphonates (that halt bone breakdown e.g., Fosamax or Actonel) or recombinant human parathyroid hormone (that increases bone formation e.g., Forteo) may be required. However, bisphosphonate use has recently fallen out of favour due to severe side-effects^{10, 11}.

Why learn more?

CaP patients often present to primary care physicians with ADT side-effects that may have not have surfaced under the care of an oncologist. For this reason, primary care physicians must be familiar with identifying and managing ADT side-effects.

(References posted with the online edition at www.fpon.ca.)

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Message from PHSA's Vice President, Provincial Cancer Care and Research

As cancer incidence increases and cancer detection and treatment continue to advance, the number of survivors in our province increases as well. This, of course, is great news, but it brings challenges too. When this group integrates back to their daily life and their ongoing care continues with their general practitioner, we know that these individuals may have special needs resulting from side-effects from treatment and psychosocial issues, among other things. The BC Cancer Agency is committed to working with you, our primary health care partners, to develop tools to help support this population. Our provincial Survivorship Program has been working on several projects to do just that.

I am pleased to share that the Survivorship Program recently received four separate



Dr. Max Coppes, MD, PhD, MBA, VP, Provincial Cancer Care and Research, Head of BC Cancer Agency, PHSA

grants for projects related to supporting survivors in their transition to post treatment care. Among those projects, the largest one involves the testing of a cancer surveillance system that integrates with primary care. It's hoped this new system will provide seamless electronic integration between the BC Cancer Agency and the electronic medical records of primary care practices. The system would integrate guidelines for surveillance by cancer type, information about side-effects by treatment, and contain key messages for recommended lifestyle changes that patients should consider. The goal is to provide patients with better continuity of care and a shared understanding of required follow-up. To support those patients who had cancer in childhood, another project underway is the

development of educational materials for adult survivors of childhood cancer, which will include involving patients in the design of materials about follow-up for their post-cancer treatment.

With the generous support from the BC Cancer Foundation, a new magazine called *Forward* was also launched this year. The intention of this magazine is to empower those who have had cancer, and their families, through sharing information, resources and personal stories to inform, support and inspire those who have experienced cancer. *Forward's* third issue will be out this fall. If you or your patients would like to subscribe for print or online copies, you can email your address to forward@bccancer.bc.ca; online versions and more information can be found at www.bccancer.bc.ca.

We look forward to sharing more, including at the Family Practice Oncology CME Day on November 1, 2014—I hope to see you there.

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Message from the chair

By Dr. Phil White, Chair and Medical Director of the Family Practice Oncology Network and family physician in Kelowna

The rationale of our Network since its inception in 2002 is to provide cancer care resources that will strengthen and enhance family physicians' abilities to care for cancer patients in their communities. Much progress has been made:

- We've had 70 family physicians complete our accredited GPO Training Program. They are now providing greater levels of cancer care, including chemotherapy, in 35 different communities.
- We've produced five years of oncology CME Webcasts – all available for viewing at www.fpon.ca. Nearly 1,000 primary care providers from BC and beyond have tuned in for these nationally accredited monthly live sessions.



- We've published and/or contributed to the development of three sets of cancer care guidelines for family physicians with others underway.
- We've organized nine Family Practice Oncology CME Days the most recent of which attracted a capacity crowd of 200+ family physicians, oncology nurses and pharmacists.

- We've partnered with UBC's Division of Continuing Professional Development to develop and present a series of accredited cancer workshops for family physicians. Over 500 practitioners from 29 communities have taken part in 40 workshops to date – with more on the way.

All these developments led to the need for change within our Network so we can continue to support this important quest. We are now part of the Agency's Survivorship and Primary

Care group led by the recently appointed Karen Blain who brings a forté for strategically managing growth and effective change from her previous post with Alberta Health Services. Further, the Network's Jennifer Wolfe takes on the new role of Education Coordinator. Both Karen and Jennifer will work closely with a new program facilitator and program assistant joining our team later this fall. Finally, I, and Drs. Catherine Clelland and Raziya Mia will take on greater Medical Lead responsibilities for the Network's focus on Guidelines, Survivorship and CME respectively.

Until next time!

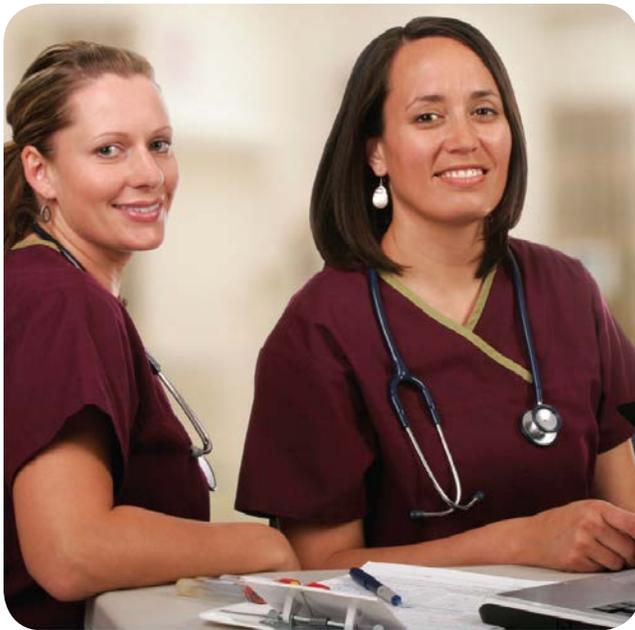
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Tobacco control in cancer treatment: how we can help cancer patients



By: El Taylor, Prevention Programs Administrator, BC Cancer Agency

The Risks: Tobacco use is a significant risk factor for cancer and other chronic diseases causing an estimated 30% of all cancer deaths in Canada each year. While great strides have been made in reducing tobacco misuse, 20% of the population still smokes¹. Not only does tobacco use affect cancer risk, it also influences cancer treatment. Furthermore, for cancer patients needing surgery, tobacco use also impacts post operative processes such as healing. It is very important that health care providers, patients and families know this and are empowered with information as to how they can reduce or quit tobacco use as it impacts patients' care and outcomes.

Health Outcome Benefits: The influence of tobacco use on cancer treatment is not to be taken lightly. Its impact on cancer treatment is of such significance that the following was noted in the 2014 US Surgeon General's report on smoking: "risk of dying could be lowered by 30-40% by quitting smoking at the time of diagnosis. For some cancer diagnoses, the benefit of smoking cessation may be equal to, or even exceed, the value of state-of-the-art cancer therapies..." (*The Health Consequences of Smoking – 50 Years of Progress: A Report of the*

Surgeon General (2014), p. 291).

Embedding into our Everyday Work with Patients: In times of fiscal constraint and a myriad of stressors on the system, how can things change so that health care providers, patients and families receive this information? How can patients and families become more empowered with such information? Embedding clinical tobacco interventions throughout our health care system is a cost effective way to provide much needed support and a standard of

care which is necessary to optimize cancer treatment outcomes.

Health care professionals can also access the *Clinical Tobacco Intervention Program (CTIP)* online modules for skill development in supporting tobacco cessation: www.tobaccoed.org

Tobacco control has a positive impact on cancer treatment. If we ask, we provide an opportunity for patients to consider

The "5 A's" rule helps health care professionals support cessation:

- **Ask** about tobacco use and chart relevant information.
- **Advise** the patient to stop.
- **Assess** readiness to stop and roadblocks to success
- **Assist** by providing referrals to BC's QuitNow services and BC's Cessation Program which provide counselling and access to medications respectively.
- **Arrange** follow-up – critical in a process where relapse is a common occurrence.

behaviour change. If we don't ask, we may minimize the importance of the issue and miss an opportunity to optimize cancer treatment outcomes for our patients.

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¹Canadian Partnership Against Cancer (2014). *The 2014 Cancer System Performance Report*. Toronto: Canadian Partnership Against Cancer.